

**NATIONAL REPORT FORMAT  
FOR THE SAIGA ANTELOPE MOU AND ACTION PLAN**

This national reporting format is designed to monitor implementation of the [Memorandum of Understanding concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope \(\*Saiga spp.\*\)](#) and the associated [Medium Term International Work Programme](#) by the MOU Signatories. It has been endorsed by the First Meeting of the Signatories to the Memorandum of Understanding concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope (Almaty, 25-26 September 2006). Reports on implementation will support exchange of information throughout the range and assist the identification of necessary future actions by the Signatories. The format has been designed to support the needs of the Range States, the MOU and CMS. Information gathered will also support the implementation CITES Decisions 19.213 to 19.217.

Please complete as appropriate and **return to the CMS Secretariat**, keeping in mind that not all sections are relevant to each State.

**1. GENERAL INFORMATION**

<b>1.1. Range State name:</b> <a href="#">Mongolia</a>
<b>1.2. Designated Focal Point with responsibility to co-ordinate MoU implementation (full contact details):</b>  <a href="#">Uranchimeg Tserendorj</a> Director of Natural Resources Policy and Implementation Department Ministry of Environment and Climate Change Ulaanbaatar, Mongolia Email: <a href="mailto:uranchimeg@met.gov.mn">uranchimeg@met.gov.mn</a>
<b>1.3. Date submitted:</b> <a href="#">15/08/2024</a> dd/mm/yyyy
<b>1.4. Period covered by the report:</b> From <a href="#">2021</a> <a href="#">2024</a> dd/mm/yyyy to dd/mm/yyyy
<b>1.5. List of other agencies or NGOs that have provided input to this report:</b>  <a href="#">World Wide Fund for Nature (WWF)'s Mongolia Program Office and Wildlife Conservation Society (WCS)'s Mongolia Program</a>

## 2. CMS MoU

2.1. Has the MoU been signed?  Yes  No  N/A

2.2. Date signed: 10/09/2010  
dd/mm/yyyy

2.3. If the MoU has not been signed, what is the target date for signing?

## 3. SAIGA POPULATIONS

3.1. Are Saiga present all year or seasonally?  All year  Seasonal

3.2. If seasonal, list the months of occurrence [e.g., 3-10, 11-2]

3.3. Current total population estimate.

Following a sharp decline caused by the PPR virus outbreak and harsh environmental conditions between 2016 and 2018, the Mongolian saiga population has gradually rebounded, exceeding the 2014 peak of 14,600 individuals, with a minimum estimate of **15,540** in November 2023.

3.4. Overall population trend  Up  Down  Stable  Mixed  Unknown

3.5. List main subpopulations (if applicable) with estimated size and trend.

A small, isolated population of 20-50 individuals resides in Naranbulag Soum, Uvs province, separated from the main population.

3.6. Is there a national recording system/database for Saiga?  Yes  No

3.7. Name of agency/agencies maintaining records/database.

Despite the absence of a national recording system or database for Saiga, WWF Mongolia has been conducting annual population assessments of the Mongolian saiga antelope, maintaining data since 1998, and providing reports to the government as required.

3.8. At what intervals is the population monitored?  Annually  Seasonally  Ad hoc  N/A

3.9. What proportion of the population is monitored?  
 >75%  50-75%  10-49%  <10%  None  N/A

3.10. List agency/agencies carrying out monitoring.

WWF Mongolia performs annual population assessments and additionally conducts monthly SMART patrols

3.11. Methods used to carry out monitoring.  Aerial  Ground  Vehicle  Mixed

3.12. If mixed, please give details by subpopulation/area.

3.13. Date of most recent monitoring effort: 20/11/2023

3.14. Does monitoring cover:

population size?  Yes  No

sex/age structure?  Yes  No

reproductive rate?  Yes  No

3.15. What measures have been taken to standardise monitoring methodology with other states?

The population assessment employs the internationally recognized distance sampling line transect methods across the full range of the Mongolian saiga's distribution. This approach has been utilized since 2010, following the aerial survey conducted in Mongolia.

3.16. What is the status of Saiga in the national Red Data Book/Red List?

They are protected by the Law on Fauna, classified as 'Very Rare,' and listed as 'Critically Endangered' in the national red list assessment.

#### 4. HABITAT

4.1. What proportion of Saiga habitat has been lost [0%] or degraded? [70%]

A spatially explicit model, utilizing long-term data, revealed that approximately 30% of the saiga's range consists of suitable habitat, while the remaining 70% has been degraded or rendered less suitable due to factors such as livestock overgrazing, human disturbance, and climate change.

4.2. What efforts have been made to restore degraded habitat and to what extent have these been successful?

Local protected areas were established to safeguard against human disturbance and development. Despite WWF Mongolia's efforts to improve pasture management, these initiatives were unsuccessful due to the need for long-term and sustained engagement and commitment from herders. Additionally, the restoration of natural springs vital to saiga was successfully implemented.

4.3. Is Saiga habitat intact or fragmented?  
 Intact  Moderately Fragmented  Severely fragmented

The saiga habitat is moderately fragmented by three paved roads within their range, which experience low traffic and allow for permeability.

4.4. List any significant physical barriers on Saiga migration routes: (e.g. pipelines, roads, railways, canals).

- There are three paved roads within the saiga's range, with a total length of 306 km."

- Planned railways, with a length of 205 km, are likely to intersect the saiga's range.

4.5. Is the impact of proposed developments in Saiga range assessed?  Yes  No

Currently, approximately 306 km of paved roads traverse the saiga's range, with an additional 103 km of paved roads and 205 km of railroads planned. Around 2,340 km<sup>2</sup> (6.3%) of the Mongolian saiga's range is covered by mining leases, including both exploration and extraction activities, with one of the larger leases located near the core saiga range in Shargiin Gobi. These developments pose potential risks of habitat loss, disturbance, and pollution. Additionally, WWF Mongolia has identified 68 habitat linkages (or movement corridors) for Mongolian saigas, spanning a total of 1,700 km to connect the species' core habitats.

4.6. How is this enforced?

Fencing along railroads in Mongolia, intended to keep livestock off the tracks, has emerged as a major environmental concern by obstructing wildlife movement and fragmenting habitats. With climate change altering the migration patterns of nomadic species, the need for updated fencing regulations has become clear. In response, the Mongolian government, with support from international NGOs, established a national standard for wildlife-friendly fences. Approved in May 2024, this standard bans barbed wire and requires fences to allow wildlife to pass underneath or jump over while still preventing livestock access. Additionally, national standards for wildlife passages along roads in open plains and mountains were developed and approved in 2015 and 2018.

4.7. What percentage of Saiga range is covered by protected areas?

By 2024, approximately 33% of the saiga's range is included within protected area networks.

4.8. List all protected areas in Saiga range, together with IUCN management category, area (hectares), seasons/months when Saiga are present, estimated number of Saiga present, and whether these include rutting/calving areas.

Name	Size (ha)	IUCN category	Months saiga present	Estimated numbers	Rutting	Calving
Bukhun (Local protected area)	169,700	NA	All year round	171	+	+
Khomiin Tal (Nature Reserve)	223,000	II	All year round	160	+	+
Mongol Els (National Park)	203,000	II	All year round	4000	+	+
Khar Azargiin Nuruu (Nature Reserve)	773,000	IV	All year round	270	-	-
Khar-Us Lake (National Park)	346,200	II	All year round	2000	-	+
Sharga-Mankhan (Nature Reserve) – Part I	312,600	IV	All year round	8000	+	+
Sharga-Mankhan (Nature Reserve) – Part II	75,900	IV	All year round	475	+	+

4.9. List any other protected areas that have been proposed or identified?

Name	Size (ha)	IUCN category	Months Saiga present	Estimated numbers	Rutting	Calving
Khuisiin Gobi	180,000	IV	All year	8000	+	+

			round			

4.10. List key areas of Saiga range lacking any protected areas.

As noted in Table 4.9, Khuisiin Gobi is a crucial area for saiga, where they breed and give birth, but it remains unprotected as of 2024.

## 5. POPULATIONS SHARED BETWEEN RANGE STATES

5.1 What transboundary initiatives have been taken for Saiga populations shared with neighbouring States or that migrate to other Range States?

The Mongolian saiga population does not undertake transboundary movements. This population is restricted to Mongolia and does not migrate across international borders, so there are no transboundary initiatives specifically targeted for this population. Conservation efforts are therefore focused solely within Mongolia.

5.2 List any transboundary protected areas.

Not applicable

5.3 List any transboundary protected areas that are planned.

Not applicable

## 6. LAWS, INSTUTUTIONS & TRADE

6.1. List Government agencies active in Saiga conservation and management and their functions related to Saiga.

- Ministry of Environment and Climate Change
- Provincial Environmental Protection Agencies
- Protected Areas (Mongol Els, Khar Us Lake, and Khomiin Tal National Parks)

6.2. Has a national strategy or action plan for Saiga been developed?  Yes  No

A national conservation strategy for saiga was developed in 2021 and is currently awaiting endorsement from the Ministry of Environment and Climate Change.

6.3. What is the legal status of Saiga?

The saiga is listed in Appendix II of CITES with a zero-trade quota established at CoP18 in 2019, effectively banning legal trade. Under the CMS, the species is protected by a 2006 Memorandum of Understanding, supported by a Medium-Term Work Programme. Saiga tatarica is classified as "Critically Endangered" on the IUCN Red List, while the Mongolian saiga is listed as "Endangered" on both the IUCN Red List and the Mongolian Red Book. Hunting of saiga in Mongolia has been illegal since the 1930s, and it is protected under the Law on Fauna as "Very Rare."

6.4. Provide details and references of relevant legislation.

### a) Mongolian National Legislation:

- Law on Fauna (2000): The Mongolian saiga is classified as "Very Rare" under Mongolia's national Law on Fauna. This classification provides legal protection, prohibiting hunting, trade, and any activities that could harm the species or its habitat.  
<https://legalinfo.mn/en/edtl/16230948910941>

**b) International Legislation:**

- CITES: The Mongolian saiga is listed in Appendix II of CITES. At the 18th Conference of the Parties (CoP18) in 2019, a zero-trade quota was established, effectively banning legal international trade of the species and its products.  
<https://cites.org/sites/default/files/eng/com/sc/70/E-SC70-58.pdf>
- CMS: The Mongolian saiga is also protected under the CMS framework through the Memorandum of Understanding Concerning Conservation, Restoration, and Sustainable Use of the Saiga Antelope, signed in 2006 by all five range states and nine cooperating organizations. This MoU is supported by a Medium-Term International Work Programme (MTIWP) that guides conservation actions for the species.  
[https://www.cms.int/saiga/sites/default/files/document/unep-cms\\_saiga\\_mos4\\_outcome1\\_mtiwp-2021-2025\\_e\\_0.pdf](https://www.cms.int/saiga/sites/default/files/document/unep-cms_saiga_mos4_outcome1_mtiwp-2021-2025_e_0.pdf)

**c) Red List:**

- IUCN Red List: The species *Saiga tatarica* is classified as "Critically Endangered" globally, while the Mongolian subspecies is listed as "Endangered" regionally.  
<https://www.nationalredlist.org/publication/mongolian-red-list-mammals>

6.5. How does current legislation regulate:

- hunting of Saiga? possession of Saiga parts and derivatives? domestic trade in Saiga parts and derivatives?

Mongolian legislation strictly prohibits the hunting, possession, and domestic trade of saiga and its parts under the Law on Fauna. Violations, including illegal trade, are subject to severe penalties such as fines, imprisonment, and confiscation. Exceptions are allowed for scientific and educational purposes, but these require special permits from relevant authorities. Enforcement is carried out by environmental inspectors, law enforcement, and customs officials, with public awareness campaigns supporting compliance.

- keeping and breeding of Saiga?

Not applicable

- import and (re-) export of Saiga parts and derivatives, and live animals?

Currently, there is a zero quota for the commercial import and (re-)export of Saiga parts, derivatives, and live animals, meaning that trade is effectively prohibited. Exceptions for scientific and other purposes are regulated by laws designed to protect endangered species listed under CITES. These laws ensure that any trade in wildlife and their derivatives complies with international standards established by CITES.

6.6. Which agencies or departments are in charge of enforcing the legislation?

[Indicate those charged with *in situ* protection, e.g. anti-poaching or surveillance of protected areas, and those charged with controlling legal and illegal trade in Saiga.]

- Ministry of Justice and Home Affairs,
- Eco Police department at National Police Agency,
- Protected Area department at Ministry of Environment and Climate Change,
- Environmental Protection Agency,
- Border Defense Agency,
- Mongolian Customs General Administrations

6.7. What penalties are applicable for infringements of the legislation?

In Mongolia, Criminal Law Code 24.5 addresses the illegal hunting and trafficking of endangered species, including the saiga antelope. The law criminalizes the hunting, capturing, or killing of protected wildlife and the illegal trade of their parts, such as saiga horns. Offenders face severe penalties, including significant fines, imprisonment, and the confiscation of equipment used in illegal activities. In serious cases, particularly those involving organized crime, penalties are harsher, with longer prison sentences. These stringent measures serve as a powerful deterrent against illegal activities related to saiga and other endangered species.

- 6.8. Provide details of activities undertaken since 2021 to control legal and illegal trade in parts and derivatives of Saiga, including: controls and inspections; seizures and confiscations; and prosecutions.
- The Prevention of Environmental Crime (PEC), in collaboration with relevant agencies, has successfully enhanced advocacy, coordination, and capacity building among member organizations and law enforcement bodies.
  - Efforts to foster cooperation among government agencies have led to enhanced expertise among personnel and the organization of joint training sessions. In September 2023, a training program titled "Crime Against the Environment and Prosecutor's Control" was conducted in Ulaanbaatar. The program, attended by 40 deputy prosecutors from across the country, was led by key legal authorities and focused on practical approaches to addressing environmental crime.
  - The Department of Ecological Police is in the process of expanding its staff from 170 to 270 officers over the 2023-2024 period. Regular training sessions were held in November and December 2023 for 142 officers, primarily new recruits, covering strategies to combat illegal logging and wildlife crime, as well as providing mental and specialized training.
  - In an effort to continuously improve the capabilities of law enforcement, 39 online video lessons, totaling 68 minutes, were developed for newly recruited and active officers within the Department of Ecological Police. These lessons, now available on the National Police Agency's internal network, provide crucial training on handling environmental crime cases and identifying illegally traded wildlife and plant species, thus reducing the need for recurring annual training.
  - Due to the absence of specific training structures and frequent staff rotations, law enforcement officials often face challenges in acquiring adequate knowledge of flora and fauna taxonomy. To address this, mobile on-the-job training was provided at 5 key border points in Mongolia, in cooperation with the PEC and the National University of Mongolia. A total of 128 officers were trained in recent legal frameworks, crime investigation, and species identification, using real case studies, best practices, and interactive methods.
- 6.9. Do stocks of horns or other Saiga products exist in your country? If so, provide details on: size and nature of the stocks; source of the stocks; owners of the stocks; stock registration and monitoring system; and controls of these stocks.

Saiga horn stocks in Mongolia are relatively small, primarily consisting of seizures by customs and law enforcement from illegal traders, poachers, and at border crossings. There is currently no centralized monitoring system, hindering accurate reporting on the size, source, and ownership of these stocks. Efforts are underway to establish a 'Chain of Custody' and develop a storage and monitoring protocol. This involves interviewing anti-poaching rangers, law enforcement, forensic police, and other stakeholders to document existing practices. Additionally, the legal framework is being reviewed to determine which agency has jurisdiction over these stockpiles.

- 6.10. What happens to confiscated parts and derivatives?  Destroyed  Stored

In Mongolia, confiscated items are typically either destroyed, used for educational purposes such as museum displays, or occasionally resold. In the case of saiga horns, most are destroyed, with a smaller number preserved for training, research, and educational purposes.

- 6.11. Have customs and other law enforcement officers been made aware of legislation concerning Saiga? Have they received training in identifying Saiga parts and derivatives?

Law enforcement officials were trained in partnership with the National Police Agency, the Prosecutor General's Office of Mongolia, and the Council for Environmental Crime Prevention, and other relevant law enforcement agencies and institutions to increase awareness of legislation concerning saiga. They also received training in identifying saiga parts and derivatives. Below are references to reports resulting from various capacity-building trainings.

- Chimeddorj B., Purevsuren S., Terbish Kh., Gantulga B., Suran D., Purevdorj S. (2017). Guide to identify animals, plants and their organs. WWF Mongolia programme office, Ministry of Environment and Tourism, Coordination Council for Crime Prevention in Mongolia, Ministry of Home Affairs and Justice. Ulaanbaatar. 242 p.
- Chimeddorj B., Purevsuren S., Terbish Kh., Gombobaatar S., Odkhuu B., Tuvshin U., Gerel N., Suran D. (2018). Identification Guide for the CITES listed species in Mongolia. WWF Mongolia programme office, National University of Mongolia, Ministry of Environment and Tourism, Mongolian Ornithological Society, Coordination Council for Crime Prevention in Mongolia, Ministry of Home Affairs and Justice. Ulaanbaatar. 450 p.
- Erdenebayar M., Gantulga M., Oyunbold G. (2020). Environmental Crimes and Violations Investigations: Issues to consider in investigating and solving illegal hunting crimes and violations. Editors: Chimeddorj B., Purevsuren S., Gantulga., Jargalsaikhan B., Baatar T. WWF Mongolia programme office, Prosecutor's General Office of Mongolia, Law Enforcement University, Coordination Council for Crime Prevention in Mongolia, Ministry of Home Affairs and Justice, National Police Agency, State Specialized Inspection Agency, Mongolian Customs General Administration, The General Authority for Border Protection. Ulaanbaatar. 312 p.
- Erdenebayar M., Jargalsaikhan B. Urgamal M., Oyunbold G., Nyamdavaa Ch., Munkhbayar O., Badamtsetseg D., Purevsuren S., Erdenebat Ch., Batsaikhan A. (2021). Environmental Crimes and Violations Investigations: Issues to consider in investigating and solving crimes and violations of illegal harvesting of trees and natural plants. Editors: Chimeddorj B., Purevsuren S. WWF Mongolia programme office, Coordination Council for Crime Prevention in Mongolia, Ministry of Home Affairs and Justice, Law Enforcement University, Prosecutor's General Office of Mongolia, State Specialized Inspection Agency, Mongolian Customs General Administration, Botanic Garden and Research Institute, Mongolian Academy of Sciences, Ministry of Environment and Tourism, National Police Agency, Ecological Police Department, The General Authority for Border Protection, National Forensic Agency of Mongolia. Ulaanbaatar. 406 p.
- Chimeddorj B., Purevsuren S., Terbish Kh., Narangarvuu D., Gombobaatar S., Onolragchaa G., Jamiyankhuu N., Bulgan T. (2021). Critically endangered and endangered animals and their organs and products use, trade and legal responsibility. WWF Mongolia programme office, Coordination Council for Crime Prevention in Mongolia, Ministry of Home Affairs and Justice, Ministry of Environment and Tourism, National University of Mongolia, Mongolian National University of Education, Prosecutor's General Office of Mongolia, National Police Agency, Ecological Police Department, State Specialized Inspection Agency, Mongolian Customs General Administration, The General Authority for Border Protection. Ulaanbaatar. 540 p.

6.12. Provide details of activities undertaken since 2004 to protect Saiga *in situ*, including: patrolling and surveying efforts; anti-poaching actions; prosecutions for poaching, etc.

Mongolia has implemented various *in situ* efforts to protect saiga, focusing on patrolling, anti-poaching measures, and legal actions. The introduction of the SMART patrolling system in 2017 has improved patrol efficiency and data collection, while regular population surveys monitor saiga numbers and threats, guiding conservation strategies. Anti-poaching efforts have been bolstered through enhanced law enforcement, collaboration between rangers and police, and the confiscation of horns. Community engagement programs have also raised awareness and involved local communities in conservation, reducing the incentive for poaching. Since the implementation of the SMART system, no saiga poaching cases have been reported, demonstrating the success of these combined efforts in protecting the species.

6.13. What proportion of Saiga range is covered by ranger or police patrols? [100%]

Current law enforcement patrols effectively cover the entire saiga range, ensuring that all critical habitats, including birthing and rutting areas, are monitored and protected.

6.14. Are these patrols effective in protecting Saiga?

Current law enforcement patrols appear to be successfully protecting saiga. Since the introduction of the SMART patrolling system in 2017, no poaching cases have been reported.

6.15. What resources (personnel, material, financial) are required to ensure effectiveness of the patrols?

To ensure effective patrols for saiga conservation, it is crucial to provide ongoing capacity building, including training in SMART patrol techniques and ranger exchange programs across range states, to enhance expertise. Adequate staffing with well-trained rangers and support staff for coordination and data analysis is essential. Field equipment, such as smartphones, motorcycles, GPS units, and drones, is necessary to implement SMART patrols effectively. Financial resources should include competitive salaries and benefits for rangers, as well as an operational budget for fuel, equipment maintenance, and logistical support.

6.16. Do patrols cover birthing and rutting areas?  Yes  No  Partially  N/A

The entire saiga range in Mongolia is patrolled by 14 rangers, covering birthing, rutting, and other critical areas or habitats.

6.17. Do rangers inside and outside protected areas have the power of arrest?  Yes  No

In Mongolia, rangers, both inside and outside protected areas, do not have the power of arrest. Their role is primarily focused on monitoring, patrolling, and enforcing environmental laws and regulations within their designated areas. They can report illegal activities such as poaching to law enforcement authorities. However, the actual power to arrest individuals suspected of committing crimes is reserved for the police, who must act with approval from the prosecutor's office.

6.18. Why are Saiga poached? Has illegal killing of Saiga increased/decreased/stabilized over the last three years?

The demand for saiga horn in China and Southeast Asia, driven by its perceived medicinal value, is the primary driver of saiga poaching. A recent study estimates that annual saiga horn consumption in China is around 9,000 kg, with each horn valued at approximately USD \$75. A survey in Thailand found that the price for a packet of horn shavings ranges from USD \$20 to \$32. In Mongolia, national police and ranger patrol data recorded 29 poaching cases involving 277 saiga between 2005 and 2024. In 56% of these cases (involving 155 saiga), offenders were not identified, primarily due to weak investigative capacity, late detection of carcasses, and the remoteness of the areas where the carcasses were found. However, poaching has significantly decreased and is no longer considered a severe threat, thanks to enhanced law enforcement and increased awareness. Since the introduction of the SMART patrolling system in 2017, no poaching cases have been reported.

6.19. What is the estimated proportion of illegal hunting for horns [100%]; for meat [0%]?

Illegal hunting of saiga in Mongolia is motivated solely by the demand for their horns, with no interest in their meat.

6.20. Provide details of the domestic legal/illegal market for Saiga products in your country, indicating its size and nature, and whether it is growing, stable or declining.

Although there is no specific time-series data to track trends in the legal or illegal market for saiga products, no evidence of saiga horn trade was found during online market surveillance and physical market surveys conducted in 2023 and 2024. This decline in the domestic market for saiga products is further supported by law enforcement patrol data, which has shown no instances of poaching since 2017.

- 6.21. Provide details of the legal and illegal international trade in Saiga products from your country during the last five years.

There is no publicly available data on the legal or illegal international trade in saiga products from Mongolia over the past five years, as such trade is prohibited under both national and international regulations, including CITES. However, a report from the customs office revealed that 2,686 saiga horns were confiscated from Russian citizens attempting to cross the Altanbulag border into Mongolia in December 2023. This suggests that Mongolia may be used as a transit route for the international market. The National Police Agency typically keeps trade-related cases confidential until they are resolved in court.

- 6.22. Give details of any socio-economic surveys carried out concerning poaching of and illegal trade in Saiga. [details, institution, date, results].

WCS Mongolia conducted a household survey in 2023 to investigate the sourcing and trafficking of saiga horns in Mongolia. Utilizing Unmatched Count Techniques, the study uncovered instances of saiga horn sourcing and trafficking through interviews with 854 households across the entire saiga range. Preliminary findings indicate that saiga horn consumption is occurring on a local scale, possibly involving horns obtained from animals that died during mass mortality events. However, further detailed investigation is necessary to confirm these results.

- 6.23. List any problems in implementing aspects of CITES relating to Saiga.

Implementing CITES regulations relating to saiga faces several challenges:

- High demand for saiga horns in illegal markets complicates conservation efforts despite existing legal protections.
- Remote and expansive borders make it challenging to control and monitor cross-border trade of saiga parts.
- Frequent staff rotations every 1-2 years in customs and border protection, intended to prevent corruption, pose a challenge due to the constant need for ongoing training.
- Tracking the origin of saiga parts, particularly when processed into forms like powder, is problematic.
- Regulations governing the establishment of the Scientific Council, the working procedures of the Steering Committee, and the setting of quotas under the current law implementing the CITES convention must be developed.

- 6.24. Describe initiatives undertaken to facilitate alternative livelihoods in communities within Saiga range.

- WWF-Mongolia, in partnership with National Association of Mongolian Agricultural Cooperatives, provides consulting services to 10 cooperatives covering around 20% of households in 10 soums. Membership increased by 2% to 1,064 households, with 97% being herding families. The cooperatives' assets reached 2,472 million MNT (~670,000 EUR) with a gross profit of 4,184 million MNT in 2023 from selling livestock-derived products.
- Eight cooperatives in Uvs and Gobi-Altai provinces diversified their income, with small-scale factory income rising to 107 million MNT in 2023, making up 32% of total sales. Over four years, 1,000 members received 98 million MNT in price differences and 32 million MNT in dividends.
- 'Sanjin Bogd' cooperative expanded its raw material warehouse with WWF support, doubling the price difference allocated to members from 1.2 million MNT to 2.5 million MNT in 2023.
- In June 2023, 133 herder households in four soums received training on green fodder planting, achieving 80% growth success and harvesting 21 tons, easing grazing pressure and improving livelihoods.

## 7. CAPTIVE BREEDING

7.1. Does your country operate capture breeding facilities?  Yes  No  N/A

7.2. List existing captive breeding facilities [locality, name, managing agency].

Not applicable

7.3. How many Saiga are held in total and at individual centres?

Not applicable

7.4. Is reproduction successful?  Yes  No

Not applicable

7.5. Give details of any co-operation with captive breeding facilities in other states?

Not applicable

7.6. Have any captive-bred animals been transferred to other range states?  Yes  No

Not applicable

7.7. Have any captive bred animals been released into the wild?  Yes  No

Not applicable

7.8. Are released animals subject to monitoring?  Yes  No  N/A

Not applicable

7.9. Are any releases planned?  Yes  No

Not applicable

7.10. Are any new captive breeding centres planned?  Yes  No

Not applicable

## 8. EDUCATION AND AWARENESS

8.1. Describe the public's awareness regarding Saiga.

Public awareness of the saiga in Mongolia has significantly increased due to efforts by the government, conservation organizations, and local communities. Campaigns, documentaries, and media coverage have raised the profile of the saiga as an endangered species, emphasizing the threats it faces. Educational programs in schools and community outreach initiatives have incorporated saiga conservation into their curricula, educating younger generations and local communities about the species' importance.

8.2. Describe educational and publicity materials and programmes that have been developed for:

In Mongolia, several educational and publicity materials and programs have been developed during the reporting period to raise awareness about the Mongolian saiga among schools, the general public, and the media.

### Schools:

To engage children in saiga conservation, a six-part puppetry series focusing on rare Gobi animals, including the saiga, was created in collaboration with the Mongolian Puppetry Theatre. These videos were shared on social media platforms and broadcast on Khovd TV, reaching approximately 45,000 viewers across 7,000 households. To ensure inclusivity, sign language was added, making the series accessible to children with hearing disabilities. The videos are also available on WWF-Mongolia's official YouTube channel. Additionally, "Saiga Day" is celebrated annually with eco-club students, featuring events designed to raise awareness and educate schoolchildren about saiga conservation. The 2024 event included field visits to saiga ranges, involving over 60 eco-club members and teachers, and reached more than 3,000 schoolchildren.

### General Public:

Several initiatives have been undertaken to raise public awareness about the Mongolian saiga. Annually, "Saiga Day" events engage communities, particularly in historic saiga ranges like Uvs province, where the population has recently increased. These events include public awareness activities such as screenings of the documentary "The Sprinter of the Desert Steppe: Mongolian Saiga," which have reached thousands of community members. Additionally, new billboards have been installed at Khovd City Airport and along major roads to educate travelers and locals about the saiga's ecological importance and conservation needs. During Earth Hour, the saiga was highlighted as one of the "Gobi's Great Six," and a donation campaign successfully raised funds to protect water sources in the Gobi.

### Press and Media:

To maximize public outreach, a variety of media channels have been used to disseminate information about the Mongolian saiga. The six-part puppetry series on rare Gobi animals, including the saiga, was broadcast on Khovd TV, reaching a wide audience in the region. The series, along with other awareness materials, has also been shared on social media and YouTube. In addition, documentaries like "The Sprinter of the Desert Steppe: Mongolian Saiga" have been featured in public events and media campaigns to educate and engage the public. Strategic billboards and information boards have been placed in high-visibility areas to continuously inform and remind the public about the importance of saiga conservation.

8.3. Is any information available on the Internet?  Yes  No

- Documentary film: <https://www.youtube.com/watch?v=wHGO0IDho-I&t=71s>
- Puppetry video for kids: <https://www.youtube.com/watch?v=fA2zg4w6gH4>

8.4. List any surveys carried out to assess changes in public attitudes to Saiga.

- Understanding local opinions on conservation is essential for effective action. In September 2023, a KAP (knowledge, attitude, and practice) survey was conducted with 632 residents from 7 soums in Khovd and Gobi-Altai provinces to assess attitudes toward Mongolian saiga and the impact of communication efforts. Key findings include:
  - **Ecological awareness:** 74.7% of respondents acknowledged the ecological importance of the Mongolian saiga, a decrease of 11% since the 2020 survey, indicating a need for continued awareness-raising efforts.
  - **Attitude toward illegal actions:** The percentage of locals willing to report illegal hunting or trade of saiga dropped slightly from 48.3% in 2020 to 41% in 2023. This decline may not reflect a change in attitude but rather the absence of poaching incidents in recent years, suggesting the need for further investigation.
  - **Support for spring protection:** 76% of respondents supported the protection of natural springs, with 63.3% willing to participate in conservation efforts voluntarily.

## 9. ECOLOGICAL STUDIES

9.1. Have any studies been carried out on habitat requirements?  Yes  No

Monitoring of Mongolian saiga movements began in 2006 with the fitting of eight GPS collars on adult females captured in Shargiin Gobi. This was the first-ever effort to capture adult saiga in the wild using the drive-net method. Since then, the movement study has expanded, and over 50 GPS collars have been fitted on individual saiga across different parts of their range, including Khuisiin Gobi, Dorgon Steppe, Mankhan, and Zavkhan region. This long-term monitoring aims to provide a better understanding of their habitat requirements and movement patterns.

9.2. Is the location of rutting and calving grounds known?  Yes  No

The general calving areas in the Sharga and Khuisiin Gobi ranges are known, but the rutting areas remain unidentified.

9.3. Are migration routes known?  Yes  No

Long-term movement data and habitat connectivity models revealed 68 potential corridors between core habitats, covering a total of 1,700 km across the entire saiga range. Additionally, potential bottlenecks that could hinder movement between the main range areas were identified.

9.4. Have any studies into dietary competition with domestic livestock been undertaken?  Yes  No

In the Great Lakes depressions of western Mongolia, where the saiga coexists year-round with livestock, a study was conducted in 2023–2024 to examine diet composition and seasonal dietary overlap. Microhistological analysis of fecal samples from saiga (n=124) and livestock (n=476) was performed across the four seasons. The results identified 48 plant species in saiga samples, compared to 37 in goats, 36 in sheep, 28 in camels, and 23 in horses. Saiga demonstrated mixed feeding habits, while sheep, goats, and camels were primarily browsers, and horses were grazers. The study also revealed that saiga had greater dietary richness, diversity, and niche breadth than livestock. Ruminants (saiga, sheep, goats) exhibited more dietary overlap compared to pseudo- and non-ruminants like camels and horses. Seasonally, overlap was higher in spring and autumn than in winter and summer. The saiga's ability to utilize a wide range of plant resources, thereby reducing competition with livestock, highlights its adaptive strategies and offers valuable insights for conservation efforts.

9.5. Has any research into disease and pathogens been carried out?  Yes  No

The introduction of Peste des Petits Ruminants virus (PPRV) into livestock in Mongolia during 2016–2017 was followed by mass mortality among the critically endangered Mongolian saiga antelope and other rare wild ungulates. Clinical, histopathologic, epidemiologic, and ecological evidence was collected to assess the nature and population effects of this outbreak among wild ungulates. The causative agent was confirmed through molecular characterization to be PPRV lineage IV. Similar spatiotemporal patterns of cases were observed among wildlife and livestock affected by the PPRV outbreak, suggesting that the virus was spilled over from livestock to wildlife at multiple locations and time points, leading to its spread among wild ungulates including saiga. See the link below for details.

[https://wwwnc.cdc.gov/eid/article/26/1/18-1998\\_article](https://wwwnc.cdc.gov/eid/article/26/1/18-1998_article)

9.6. List any recent and ongoing ecological studies, with details of reports or publications.  Yes  No

- Saiga habitat connectivity: <https://link.springer.com/article/10.1007/s42991-023-00391-2>

9.7. Are the causes of natural mortality understood?  Yes  No

The primary predator of adult saiga is the gray wolf (*Canis lupus*), followed by the golden eagle (*Aquila chrysaetos*), with the lynx (*Lynx lynx*) playing a lesser role. Most predation on young saiga is caused by raptors, such as the golden eagle and cinereous vulture (*Aegypius monachus*), as well as by red foxes (*Vulpes vulpes*) and corsac foxes (*V. corsac*). They also suffer significant mortality during disease outbreaks, such as from the PPR virus, and during periodic harsh winters.

9.8. What are the main natural predators?

The main natural predators of saiga calves are red foxes, lynxes, golden eagles, and cinereous vultures, while golden eagles and grey wolves prey on adults. Additionally, domestic dogs typically do not have a regular detrimental impact on the local saiga population but may contribute to mortality during harsh winters.

9.9. Are there any predator control programmes in the Saiga's range?  Yes  No

Not applicable

## 10. THREATS

Rate the impact of the main threats to Saiga in your country

	Nil	Low	Medium	High	Very high	Unknown
Hunting for meat						
Hunting for horns/trade						
Habitat loss						
Livestock competition						
Disease						
Climate						
Climate change						
Predation						
Fragmentation						
Demographic factors						
Barriers to migration						
Habitat degradation / overgrazing						

## 11. ACTION

Which priority measures to conserve or restore Saiga does your country wish to take in the next 5 years?

- Reduce livestock numbers by 10% across the saiga range without compromising the livelihoods of herder communities.
- Extend reserve pasturelands in up to 10% of saiga range soums into critical habitats.
- Reduce potential negative impacts from mining and extractive industries in the saiga range by empowering decision-makers and local herders.
- Minimize and mitigate the impacts of new linear infrastructure, such as paved roads and railways, in key saiga habitats.
- Promote wildlife-friendly herding practices to reduce competition for resources between saiga and livestock.
- Secure cross-sectoral support for policy development on livestock vaccination programs around key saiga sites.
- Conduct a climate change vulnerability assessment.
- Mitigate the impacts of environmental extremes (droughts and harsh winters) by providing supplemental resources.
- Restore natural springs or water points in the saiga range.
- Reinforce small populations and re-establish new populations through translocations into suitable sites within their historical range.
- Establish a captive breeding center and foster transboundary collaboration on captive breeding.
- Expand the PA network to cover at least 20% of Mongolian saiga habitat.

- Improve the management effectiveness of protected areas to the level of 2020.
- Scale up the SMART patrolling system in the saiga range.
- Develop a population monitoring program across the entire range, including isolated and/or translocated populations.
- Deploy GPS collars on adult saiga.
- Conduct genetic surveys to clarify taxonomy.
- Implement other ecological surveys, such as resource selection studies.

**12. OTHER MEASURES**

Please provide details of any other country-specific actions taken that have not been covered yet.